Participatory Development and Implementation of a Community Research Workshop: Experiences From a Community-Based Participatory Research Partnership

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Abstract

Background: Although community-based participatory research (CBPR) principles stress the importance of "equitable partnerships" and an "empowering and power-sharing process that attends to social inequalities," descriptions of actual projects often focus on the challenges confronted in academic—community partnerships. These challenges occur in the context of economic and power inequities and the frequently limited diversity of researchers. Less often does this discourse attend to the link between the principles of CBPR and their empowering potential for community members who internalize and use these principles to hold outside partners accountable to these ideals.

Objectives: This article documents the participatory development and implementation of a community research workshop, the community and organizational contexts, the content of the workshop, and lessons learned. Workshop objectives included increasing community knowledge of the research process, positively impacting community members' perceptions and attitudes about research, and improving researchers' understanding of community knowledge, perceptions, and experiences with research.

Methods: This project was conducted as a part of the larger United States Department of Agriculture, Agriculture Research Service (USDA ARS) Delta Nutrition Intervention Research Initiative (Delta NIRI). The workshop was developed by a joint academic—community team in partnership with a community-based workshop advisory committee (WAC) and implemented in three rural communities of the lower Mississippi Delta. Development included a dry run with the WAC, a pilot workshop, and a focus group to refine the final content and format.

Conclusions: Applying participatory principles to the development of the community research workshop resulted in the creation of a mutually acceptable workshop and co-learning experience that empowered community members in their involvement in other community research projects.

Keywords

Community-based participatory research, community health partnerships, health disparities, power sharing, public health, rural health, health care

Is participation the same thing as empowerment? Just because we participate, doesn't mean we are empowered.

—Community WAC Member

Embedded within this quote lies an insight into a reality that is perhaps not uncommon in the context of CBPR. Although CBPR principles stress the importance of "equitable partnerships" and an "empowering and power-sharing process that attends to social inequalities,"[1] descriptions of actual projects often focus on the challenges confronted in academic—community partnerships. These challenges occur in the context of economic and power inequities and the frequently limited diversity of researchers.[2-4] Less often does this discourse attend to the link between the principles of CBPR and their empowering potential for community

members who internalize and use these principles to hold outside partners accountable to these ideals.

The current public health focus on behavioral risk reduction, disease prevention, and health disparities has generated many health initiatives targeting underserved populations. CBPR is an approach that is increasingly being promoted to increase community participation vital to the success of these efforts.[5] As CBPR gains recognition in the health field, funders are increasingly demanding community engagement in all phases of the research process.[6,7] These requirements have the potential to empower community members—even when CBPR is initiated by outsiders—if community members are aware that these requirements for their participation exist and understand the power this gives them. Changes in knowledge, critical awareness, and willingness to "ask why" are practical means to empowerment.[8-11] These concepts were the focus of this project, which was funded by the USDA ARS and implemented within the context of an existing CBPR initiative known as the Delta NIRI.

This article documents the participatory development and implementation process of a community research workshop, the context within which this work was accomplished, the workshop's content, and lessons learned. Three objectives of the project were to increase community knowledge of the research process, positively impact community members' perceptions and attitudes about research, and improve researchers' understanding of community knowledge, perception, and experience with research.

DELTA NIRI

In 1995, Congress enacted legislation to address nutritionally responsive diseases in the Lower Mississippi Delta region of Arkansas, Louisiana, and Mississippi through nutrition intervention research. Congress charged that the research be community based and that interventions be sustainable in these communities. The ARS and a consortium of universities established the Delta NIRI and chose CBPR as the methodology most likely to improve the health and well-being of Delta residents and to sustain the interventions. Formative research documented community residents' perceptions of food, nutrition, and health problems, how to approach solutions, and how to get "buy in" from communities to participate in research.[12-14] A series of meetings with key informants, community members, and health and political leaders led to the selection of three research sites: Marvell, Arkansas; Hollandale, Mississippi; and Franklin Parish, Louisiana. In 2003, local Delta NIRI research groups, composed of community and academic partners, were formed. These groups developed organizational structures, and planned and implemented nutrition interventions, including the following.

Marvell

The Will Try Program encourages children to try new fruits and vegetables. The Boys Girls Adults Community Development Center Summer Day Camp increases physical activity and builds self-esteem through noncompetitive activities. The Walking Club sets daily and weekly goals to encourage physical activity. Monthly, a healthy breakfast is served where attendees receive a nutrition lesson; an existing walking trail was refurbished to provide a place to walk. These interventions are increasing exercise and providing social and emotional support for those who are changing behaviors.

Hollandale

The Walking Intervention[15] teaches adults maintenance of good health by eating and exercise. The School Kids Access to Treats to Eat (SKATE) provides elementary students with fresh fruits, vegetables, and nutrition lessons. The Soccer Program, now incorporated into the public school, gives students the opportunity to learn the game, compete in championships, exercise, and obtain nutritional food information.

Franklin Parish

People United to Sustain Health is a faith-based program that offers nutrition classes and cooking demonstrations designed to increase fruit and vegetable consumption and exercise among adults. The Children and Nutrition study provided in-class lessons to fourth-grade students on how to increase fruit and vegetable intake and exercise. Similarly, Camp SHINE (Sharing Healthy, Innovative Nutrition Experiences) provided fourth and fifth graders with fun, interactive lessons on how to adopt healthy lifestyles during their summer break. Figure 1 shows the Delta NIRI region and lists characteristics of the research partnering communities.

Socio-Demographic Characteristics

	Marvell School District, AR	AR	Hollandale, MS	MS	Franklin Parish, LA	LA	US
Population*	3815	2.67 million	3437	2.84 million	21,263	4.5 million	
% African American*	60.7%	15.7%	83.2%	36.3%	31.6%	32.5%	12.3%
Median Age*	na	36	28.3	33.8	35.9	34	35.3
% 5 years and below*	7.9%	6.8%	8.8%	7.2%	7.2%	7.1%	6.8%
% 65 years and above*	16.9%	14.0%	11.0%	12.1%	15.3%	11.6%	12.4%
Median Household Income*	na	$32,182	$20,135	$31,330	$22,964	$32,566	$41,994
Per Capita Income*	$13,560	$16,904	$9,251	$15,853	$12,675	$16,912	$21,587
% in Poverty*	31.4%	15.8%	38.6%	19.9%	28.4%	19.6%	12.4%
% Adults HS graduates*	59.1%	75.3%	58.0%	72.9%	61.3%	74.8%	80.4%

Health Status Characteristics

	Phillips County, AR	AR	Washington County, MS	MS	Franklin Parish, LA	LA	US
All Cause Mortality Rate**	1235.9	958.9	1137.4	1033.1	1129.6	1007.3	832.9
Cancer Mortality Rate**	269.8	214.8	253.9	221.3	198.4	230.4	202.6
CVD Mortality Rate**	490.5	368.7	478.1	418.7	555.9	365.4	306.5
% Diabetic***	na	8.1%	na	10.9%	na	9.2%	7.5%
% Obese***	na	26.9%	na	31.4%	na	27.1%	25.1%

* US Census Bureau, 2000 US Census. 2000 US Census data for Marvell School District obtained from National Center for Education Statistics. **CDC, 1999-2004 combined age-adjusted rates per 100,000 persons. Cancer ICD-10 codes include C00-C48. Cardiovascular disease ICD-10 codes include I00-I78. ***CDC, Behavior Risk Factor Surveillance System, 2006. Abbreviations: AR=Arkansas, MS=Mississippi, LA=Louisiana, US=United States, HS=High School, CVD=Cardiovascular Disease. NA=not available
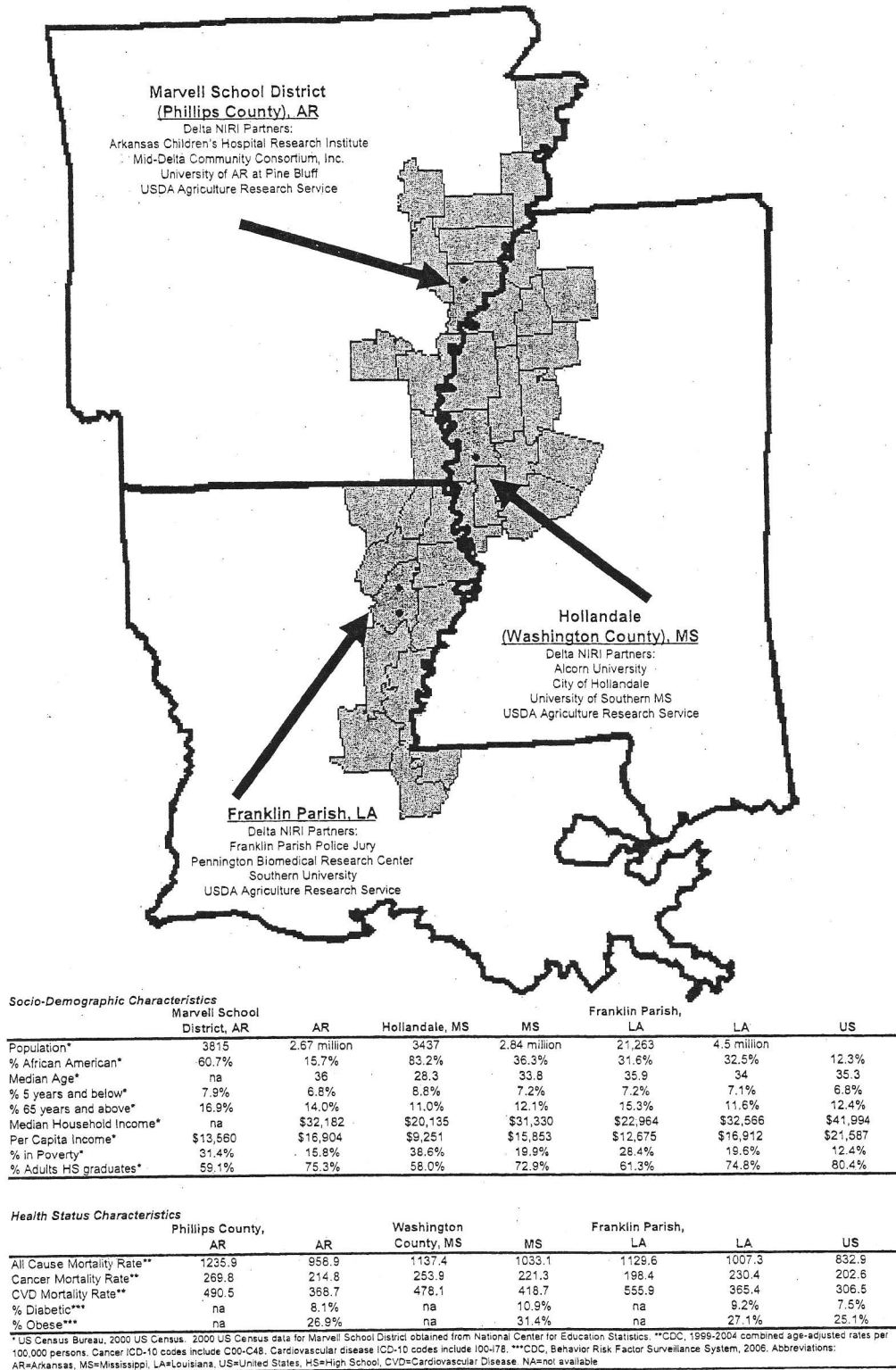
Figure 1. Delta NIRI Region (light shading) and Target Counties/Parishes (dark shading) in Arkansas, Louisiana, and Mississippi, With Initial Partners and County/Parish Characteristics (inset table).

Origins of the Workshop Project

In 2005, a Delta NIRI academic partner perceived the need for Delta NIRI community partners to learn more about the research process and research ethics. This idea was discussed among NIRI partners, who agreed such training would be beneficial. The University of Arkansas for Medical Sciences (UAMS) College of Public Health Office of Community-Based Public Health (O-CBPH) was asked to develop a community research workshop with NIRI partners. An O-CBPH workshop team (Stewart, Colley, and Felix) was formed. The O-CBPH maintains partnerships with several Arkansas community-based organizations (CBOs) to serve as model programs for CBPH and CBPR. Anna Huff, the executive director of the Mid-Delta Community Consortium, a nonprofit, CBO, was added as a paid member to the workshop team to provide a community perspective.

METHODS

Process of Workshop Development

In keeping with the community-based focus of the Delta NIRI, the community research workshop was developed using a participatory approach. The team met with the three local NIRI research groups to discuss their interest in a community research workshop. Once each community's interest was confirmed, a subcommittee from each of the NIRI research groups was formed to serve as a WAC for the workshop team. The workshop team met with the three WACs in 13 face-to-face meetings and 7 conference calls, and communicated regularly through e-mail.

The Community's Role

Because of its geographic proximity and past working relationship with workshop team members, the Marvell WAC served as the principle community partner with the workshop team during development. Initial discussions focused on the workshop's usefulness and content areas of greatest interest. Marvell WAC shared their thoughts on community participation and empowerment, and how these concepts manifest in their interactions with researchers, all of which informed the final workshop content. The Marvell WAC advised on workshop objectives, content, format, length, attended a dry run

of the workshop, and gave feedback for improvements. They also approved a presentation abstract about the workshop for a national conference.

Workshop Content

The identified workshop content areas focused on CBPR, the history and ethics of research, Institutional Review Boards (IRBs), and IRB review processes. With this list of content areas, Colley reviewed the literature, gathered unpublished examples of curricula related to these topics, and contacted others who carried out similar trainings. A critical source for the final workshop curriculum was Family Health International's *Research Ethics Training Curriculum for Community Representatives*.[16] After compiling these sources, Colley developed two draft workshop outlines, one with multiple interactive activities and the other with traditional lecture presentations.

Workshop Dry Run

The Marvell WAC made several suggestions for improving the workshop content and process after participating in a dry run of the interactive version of the workshop, including simplifying the language used to describe technical concepts, adding more graphics to presentation slides, giving participants small gifts and completion certificates, and holding the workshop in a neutral location where community members would feel comfortable gathering. They also suggested giving participants a glossary of common research terms, research ethics guidelines, a sample consent form, and an Internet research resources list. The workshop's final content was organized into two modules, each with three sections (Table 1).

Workshop Pilot

After these revisions, an 8-hour, 1-day workshop was piloted in Marvell, with the Marvell WAC assisting in workshop scheduling and participant recruitment. The pilot was attended by 28 community members, the majority of whom had been involved in the Marvell NIRI. Many participants expressed in a pre-workshop survey (completed by 28 [100%] workshop participants) that they attended the workshop to improve their knowledge of health research and believed the workshop would build their capacity and skills. A few said they participated because they felt it was their duty as community members to be involved.

In a post-workshop survey (completed by 26 [93%] workshop participants), participants said the content was appropriate and that what they learned would be "most useful," but they wanted additional information on how to participate as research partners and/or research subjects in community research projects. Suggestions for improvement included increasing the use of graphics in the presentation slides and holding the workshop in a place that was less busy. Overall, the responses were very positive and indicated participants would recommend the workshop to other community members.

Focus Group Discussion Methods

Two months after the pilot workshop, 12 participants were recruited by the Marvell WAC community members to participate in a focus group facilitated by Colley. A question guide was used to obtain feedback on the following: the workshop content, interactive activities, and what information was most helpful and least helpful to participants. Participants were also asked to give suggestions about how to improve the workshop overall.

RESULTS

Findings From Focus Group Discussion

Two key themes emerging from the focus group discussion included the appropriateness of the workshop content and structure, and empowerment.

Workshop Content and Structure. Most participants agreed the workshop topics were important and relevant to some of their experiences working in a research project. Some commented the workshop was "too long," with one commenting the length was not good for older persons. A couple of the participants suggested that the workshop be conducted in two shorter days instead of one long one.

Table 1. Workshop Content and Corresponding Learning Objectives			Learning Objectives		
Content			Increase Community Knowledge About Health-Related Research	Improve Community Members' Perceptions and Attitudes About Research	Improve Researchers' Understanding of Community Knowledge, Perceptions, and Experiences With Research
Module I	Health Research	Define health research	√	√	
		Define clinical and policy benefits of research	√	√	
	Community Participation	Define community	√	√	√
		Define special research communities	√	√	√
		Explain importance of community participation in research	√	√	√
		Identify differences between traditional and CBPR	√	√	√
	Research History	Understand research history that influenced development of key research ethics documents	√	√	
		List the research	√	√	
Module II	Ethics Principles	Learn three fundamental principles of research ethics	√		√
		Identify vulnerable research participants	√		√
	IRB	Define the role(s) of the IRB/Ethics Committee	√	√	
		Explain the difference between medical and behavioral research	√	√	
		Describe who makes up IRB committees	√	√	
	Research Process	Identify basic components of the research process	√		

Empowerment. Nearly all the participants said they gained more tools to ask questions when called on the phone about participating in a survey; by knowing more about research, they lessened their chances of being "a guinea pig." One person stated, "People have rights about how you collect and gather information—researchers are in and out of the community." The workshop provided information that participants equated to knowing their rights as citizens; "rights that everyone doesn't know," as one participant stated.

Focus group participants were continually challenged by a few members to really think about what CBPR means, to take advantage of what was presented at the workshop, and to "truly become partners and build knowledge." One participant suggested that, to improve the community, researchers working within the community need to be challenged. This discussion led to participants reflecting on their past and present experiences with research projects. They openly discussed positive and negative reactions to these present experiences.

Final Revisions and Implementation

Changes made to the workshop after the Marvell pilot and focus group discussion included the addition of small group exercises, use of examples from local NIRI studies the participants were familiar with, and shortening the time

participants had to attend by splitting the workshop into two separate sessions.

The final workshop is organized into two "stand-alone" modules that can be delivered jointly or individually, with Module I requiring 3 hours and Module II requiring 5 hours to complete. See Table 1 for module content and Appendix A for the full workshop guide. The format includes traditional lectures using presentation slides, discussion prompts, and a limited number of interactive exercises.

This revised version was used in both Hollandale and Franklin Parish, where the local WACs recommended that the two modules be offered on separate evenings to accommodate community members' schedules and to increase participation. These WACs also assisted with logistics and recruitment. Table 2 describes workshop participant demographics.

DISCUSSION

Challenges and Lessons Learned

A major challenge in this project was balancing desires for the workshop to be content rich, participatory, and interactive, with the communities' requests to limit the workshop's length. This tension was highlighted by WAC members during workshop development. For example, during the dry run, role plays,

Characteristics	Marvell Pilot	Hollandale	Franklin Parish	Total
Table 2. Demographics of Workshop Participants Completing Evaluation				
Age (yrs)	($n = 25$)	($n = 19$)	($n = 11$)	($n = 55$)
18–29	8%	5%	9%	7%
30–50	20%	37%	45%	31%
≥51	72%	58%	45%	62%
Gender	($n = 25$)	($n = 19$)	($n = 11$)	($n = 55$)
Female	96%	95%	91%	95%
Male	4%	5%	9%	5%
Race/ethnicity	($n = 25$)	($n = 18$)	($n = 11$)	($n = 54$)
African American	88%	100%	82%	91%
Caucasian	12%	…	18%	9%
Education level	($n = 25$)	($n = 18$)	($n = 11$)	($n = 54$)
High school or less	4%	16%	…	7%
High school diploma/GED	16%	28%	18%	20%
College or more	80%	56%	82%	72%

Note. Demographics only available for those completing an evaluation form.

storytelling, interactive exercises, and small group activities were used to increase participant engagement. However, these time-intensive methods did not allow the community-desired content to be included in a 1-day period. As a result, traditional lectures using presentation slides, discussion prompts, and a limited number of interactive exercises were used in the pilot. Participation in workshop discussions was fairly good and overall feedback was very positive, although several respondents felt the workshop was too long and required too much sitting. Subsequent workshops were delivered in two sessions on separate evenings with small group exercises and local examples. This format seemed to be more amenable to the participants' needs and resulted in fewer complaints about length.

Several factors, including the participatory approach used in developing the workshop and the relationship between the facilitators and workshop participants, were keys to the success of the project. WAC members provided critical input and continued to be engaged in the project throughout development, implementation, and in dissemination (some are co-authors on this paper).

Workshop participants were primarily African American. All three workshops were conducted primarily by Colley, a mature African-American woman with years of experience working in rural, grassroots, predominately African-American communities, communities similar to the three involved with this project. Colley also had primary responsibility for communications between the workshop team and the community partners, allowing her to establish a good rapport with the communities before the workshops. One participant stated that she was "proud" that an African American was leading the workshop and this made a difference in her attending the workshop. These factors are believed to have contributed to the extent to which participants showed interest in the topics and engaged in workshop discussions.

Development of this workshop was accompanied by interesting discussions regarding empowerment. According to anecdotes from community members who co-authored this paper, the workshop and the focus group stimulated discussions among Marvell community members about how to ensure all community partners' voices are heard when NIRI decisions are being made. This dialogue resulted in the community's decision to meet separately before the full NIRI research group meetings attended by academics and agency partners to allow them to discuss things more freely, hear all voices, develop community consensus, and speak with a united voice. Other benefits have included their decision to revitalize plans for a school-based parenting group and for a self-education effort to increase community understanding of the terminology and implications of CBPR.

Likewise, in Hollandale and Franklin Parish, the workshops generated discussions about additional research issues of community interest to pursue through future CBPR activities.

CONCLUSION

The field of public health is increasingly acknowledging the importance of community participation in developing and implementing research to change health behaviors, prevent diseases, and reduce health disparities. Community members involved in CBPR projects have expressed an interest in gaining more knowledge about CBPR, the research process, and research ethics. Applying participatory principles to the development of the community research workshop resulted in the creation of a mutually acceptable workshop and co-learning experience that empowered community members in their involvement in other community research projects.

REFERENCES

1. Israel BA, Schulz AJ, Parker EA, Becker AB, Allen III AJ, Guzman JR. Critical issues in developing and following community based participatory research principles. In: Minkler M, Wallerstein N, editors. *Community based participatory research for health*. San Francisco; Jossey-Bass; 2003. p. 56.

2. Sullivan M, Chao SS, Allen CA, Kone A, Pierre-Louis M. Community-researcher partnerships: Perspectives from the field. In: Minkler M, Wallerstein N, editors. *Community based participatory research for health*. San Francisco; Jossey-Bass; 2003. p. 113-133.

3. Bhatia R. Swimming upstream in a swift current: Public health institutions and inequality. In: *Health and social justice: Politics, ideology, and inequity in the distribution of disease*. San Francisco; Jossey-Bass; 2003. p. 557–78.

4. Chavez V, Duran B, Baker QE, Avila MM, Wallerstein N. The dance of race and privilege in community based participatory research. In: Minkler M, Wallerstein N, editors. *Community based participatory research for health*. San Francisco; Jossey-Bass; 2003. p. 81–97.

5. LaVeist TA. *Addressing disparities in health and health care. In: Minority populations and health: An introduction to health disparities in the United States, 2005*. San Francisco: Jossey-Bass; 2005. p. 283–97.

6. Viswanathan M, Ammerman A, Eng E, Gartlehner G, Lohr KN, Griffith D, et al. Community-based participatory research: Assessing the evidence. Evidence Report/Technology Assessment No. 99 (Prepared by RTI—University of North Carolina Evidence-based Practice Center under Contract No. 290-02-0016). AHRQ Publication 04-E022-2. Rockville (MD): Agency for Healthcare Research and Quality; July 2004.

7. Green L, Daniel M. Guidelines and categories for classifying participatory research projects in health promotion [on the Internet]. [cited 2008 Feb 29]. Available from: http://lgreen.net/guidelines.html

8. Gutierrez LM, DeLois KA, GlenMaye L. Understanding empowerment practice: Building on practitioner-based knowledge. *Fam Soc*. 1995;76:534–42.

9. Foster-Fishman PG, Salem DA, Chibnall S, Legler R, Yapchai C. Empirical support for the critical assumptions of empowerment theory. *Am J Community Psychol*. 1998;26:507–36.

10. Zimmerman MA. Psychological empowerment: Issues and illustrations. *Am J Community Psychol*. 1995;23:581–99.

11. Laverack G. Using a 'domains' approach to build community empowerment. *Community Dev J*. 2006;41:4–12.

12. Ndirangu M, Perkins H, Yadrick K, West JR, Bogle ML, Avis-Williams A, et al. Conducting needs assessment using the comprehensive participatory planning and evaluation model to develop nutrition and physical activity interventions in a rural community in the Mississippi Delta. *Prog Commun Health Partnersh*. 2007;1:41–8.

13. Ndirangu M, Yadrick K, Bogle ML, Graham-Kresge S. Community-academia partnerships to promote nutrition in the Lower Mississippi Delta: Community members perceptions of effectiveness, barriers, and factors related to success. *Health Promot Pract*. 2008;9:237–45.

14. Yadrick K, Horton J, Stuff J, McGee BB, Bogle ML, Davis L, et al. Perceptions of community nutrition and health needs in the Lower Mississippi Delta: A key informant approach. *Journal of Nutrition, Education and Behavior*. 2001;33:266-277.

15. Zoellner J, Connell CL, Santell R, Fungwe T, Strickland E, Avis-Williams A, et al. Fit for Life Steps: Results of a community walking intervention in the Rural Mississippi Delta. *Progress in Community Health Partnerships: Research , Education, and Action*. 2007;1:49–60.

16. Family Health International. Research ethics training curriculum for community representatives [last updated 2004; cited 2008 Oct 4]. Available from: http://www.fhi.org/en/RH/Training/trainmat/ethicscurr/retccr.htm